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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,583	11/13/2003	Gordon Clark	2316.1816US01	1697
23552 7590 11/14/2007 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER BUI, HUNG S	
			ART UNIT 2841	PAPER NUMBER
			MAIL DATE 11/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/714,583

Applicant(s)

CLARK ET AL.

Examiner

Hung S. Bui

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/30/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/19/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) *
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) •
Paper No(s)/Mail Date 08/30/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath/declaration filed on 07/19/2004 is acceptable.

Information Disclosure Statement

2. The IDS filed on 08/30/2007 have been considered and made of record.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al. [US 6,241,562] in view of Campbell et al. [US 7,187,555].

Regarding claim 1, Benda et al. disclose a patch panel module (see figure 4), comprising:

- a housing assembly (50, 90, figure 4, column 3, lines 15 and 32) having a general L-shaped construction, including at least one-piece housing (50, figure 4) including a face plate (40, figure 4) having a front opening (a plurality of holes disposed thereon the face plate, figure 4); and
- a module card (200, figure 4, column 3, line 54) attached to the housing by a snap-fit (53, press fit into a hole of the module card, as shown in the figure 4,

and/or 54, 55, figure 4, column 3, lines 5-16) connection, the module card including a front connector (210, figure 4, column 3, line 55) positioned adjacent to the front opening, and a rear connector (220, figure 4, column 3, line 55) located at an end of the module card opposite the front connector.

Benda et al. disclose the instant claimed invention except for the housing assembly being a one-piece housing.

Campbell et al. disclose a housing assembly (figures 4-5) being covered a module card (106, figure 5, column 5, line 28), wherein the housing assembly includes a one-piece housing construction (see figures 4-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use only one cover of the housing assembly of Benda et al., as suggested by Campbell et al., for the purpose of reducing space which was occupied in the patch panel module system and providing more space or airflow path to dissipate heat in the patch panel module system.

Regarding claims 2 and 6, Benda et al., as modified, disclose a pair of securing arrangements (105, 115, figures 4-5 and 8, column 2, lines 64-65) including first and second flexible tabs for securing the module to a patch panel chassis.

Regarding claim 3, Benda et al., as modified, disclose wherein the L-shaped construction is defined by the face plate and a housing side, the face plate being oriented generally perpendicular to the module card and the housing side being oriented generally parallel to the module card (see figure 4)

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al., as modified, as applied to claim 3 above, and further in view of Richard [US 4,441,140].

Regarding claim 4, Benda et al. disclose the instant claimed invention except for wherein the housing further includes a handle extending outward from the housing side.

Richard discloses an electronic card (figure 4) having at least one handle (51, figure 4, column 4, line 35) protruding therefrom on one side of a housing (see figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a handle on a side housing of Benda et al., as suggested by Richard, for the purpose of assembly/disassembly the module card within the patch panel chassis.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al., as modified, as applied to claim 3 above, and further in view of Ross et al. [US 6,570,770].

Regarding claim 5, Benda et al., as modified, disclose the instant claimed invention except for at least one aperture formed between the face plate and the housing side for viewing an LED positioned on the module card.

Ross et al. disclose an electronic module card (20, figure 1) having a face plate (50, figure 1) and a housing side (55, figure 1), the electronic module card has at least

one hole (36, 37, figure 3a) being formed between the face plate and the housing side to dispose LED (32, figure 3a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the mounting design of Ross et al. in Benda et al., as modified, for the purpose of providing indicator light to the module card.

7. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al., as modified, as applied to claim 3 above, and further in view of Wong et al. [US 6,028,771].

Regarding claims 7 and 18, Benda et al. disclose the snap-fit connection including at least one latch (54, 55, figure 4) formed on the housing side of the L-shape construction to engage with a side of the circuit board (200, figure 4).

Benda et al., as modified, disclose the instant claimed invention except for the latch being arranged to engage a hole in the module card.

Wong et al. disclose an electronic cartridge (10, figures 2-3) having a circuit board (14, figures 2-3) and enclosed by a L-shaped housing construction (12, figures 2-3), wherein the L-shaped housing construction is molded (see abstract) and has at least one latching portion (30, figures 2-3) protruding therefrom and cooperated with at least one hole (24, figures 2-3) on the circuit board.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the locking mechanism design between the latch and the

hole of Wong et al., in Benda et al., as modified, for the purpose of locking the housing construction and the circuit board.

8. Claims 8-9 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al. [US 6,241,562] in view of Wong et al. [US 6,028,771].

Regarding claim 8, Benda et al. disclose a patch panel module (see figure 4), comprising:

- a housing assembly (50, 90, figure 4, column 3, lines 15 and 32) having a face plate (40, figure 4) and housing side (50, figure 4) being oriented generally perpendicular to one another, the face plate including at least one front opening (a plurality of holes disposed thereon the face plate, figure 4);
- a module card (200, figure 4, column 3, line 54) having a front connector (210, figure 4, column 3, line 55) and a rear connector (220, figure 4, column 3, line 55), the front connector being positioned adjacent to the front opening of the housing, the module card being secured to the housing by a retaining structure, the retaining structure including: a flexible latch (54, 55, figure 4) formed on the housing, wherein the flexible latch engages the edge of the module card to provide a snap-fit connection between the housing and the module card.

Benda et al., as modified, disclose the instant claimed invention except for the latch being arranged to engage a hole in the module card.

Wong et al. disclose an electronic cartridge (10, figures 2-3) having a circuit board (14, figures 2-3) and enclosed by a L-shaped housing construction (12, figures 2-3), wherein the L-shaped housing construction is molded (see abstract) and has at least one latching portion (30, figures 2-3) protruding therefrom and cooperated with at least one hole (24, figures 2-3) on the circuit board.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the locking mechanism design between the latch and the hole of Wong et al., in Benda et al., as modified, for the purpose of enabling securement the housing and the circuit board.

Regarding claims 9 and 12, Benda et al., as modified, disclose a pair of securing arrangements (105, 115, figures 4-5 and 8, column 2, lines 64-65) including first and second flexible tabs for securing the module to a patch panel chassis.

Regarding claim 13-17, The claim method steps would have been necessitated by the product structure.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al., as modified, as applied to claim 8 above, and further in view of Wong et al. [US 6,028,771].

Regarding claim 10, Benda et al. disclose the instant claimed invention except for wherein the housing further includes a handle extending outward from the housing side.

Richard discloses an electronic card (figure 4) having at least one handle (51, figure 4, column 4, line 35) protruding therefrom on one side of a housing (see figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a handle on a side housing of Benda et al., as suggested by Richard, for the purpose of assembly/disassembly the module card within the patch panel chassis.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al., as modified, as applied to claim 8 above, and further in view of Ross et al. [US 6,570,770].

Regarding claim 11, Benda et al., as modified, disclose the instant claimed invention except for at least one an aperture formed between the face plate and the housing side for viewing an LED positioned on the module card.

Ross et al. disclose an electronic module card (20, figure 1) having a face plate (50, figure 1) and a housing side (55, figure 1), the electronic module card has at least one hole (36, 37, figure 3a) being formed between the face plate and the housing side to dispose LED (32, figure 3a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the mounting design of Ross et al. in Benda et al., as modified, for the purpose of providing indicator light to the module card.

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benda et al., as modified, as applied to claim 8 above, and further in view of Campbell et al. [US 7,187,555].

Regarding claim 19, Benda et al. disclose the instant claimed invention except for the housing assembly being a one-piece housing.

Campbell et al. disclose a housing assembly (figures 4-5) being covered a module card (106, figure 5, column 5, line 28), wherein the housing assembly includes a one-piece housing construction (see figures 4-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use only one cover of the housing assembly of Benda et al., as modified, as suggested by Campbell et al., for the purpose of reducing space which was occupied in the patch panel module system and providing more space or airflow path to dissipate heat in the patch panel module system.

Response to Arguments

12. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Kha et al. [US 6,752,665] disclose modular cross-connect with removable switch assembly.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gutierrez F. Diego can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number:
10/714,583
Art Unit: 2841

Page 11

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/31/2007
Hung Bui
Art Unit 2841



TUAN T. DINH
PRIMARY EXAMINER

11/17/07